

### **AMENDMENTS TO THE CLAIMS**

This listing of the claims will replace all prior versions, and listings, of claims in this application.

#### **Listing of Claims**

1.-5. (Canceled)

6. (Currently Amended) A method for determining the extent of inactivation of MetAP-2 in a biological sample, ~~or fraction thereof~~, derived from a subject, comprising the steps of:

(a) administering a test compound which is an inhibitor of MetAP-2 to the subject, wherein any MetAP-2 in the body of the subject that reacts with the test compound is inactivated MetAP-2 and any MetAP-2 that does not react with the test compound is free MetAP-2;

(b) removing a plurality of biological samples from the subject, wherein each of the plurality of biological samples is derived from a different tissue of the subject; and

(c) determining the amount of free MetAP-2 within each of the plurality of the biological samples, ~~or fractions thereof~~; and

(d) comparing the amounts determined in step (c) with the amount determined in a control sample;

wherein a decrease in the amounts in each of the biological samples determined in step

(c) compared to the amount in the control sample ~~determined in step (d)~~ is a measure of the extent of inactivation of MetAP-2 in each of the biological samples, ~~or fractions thereof~~.

7. (Currently Amended) The method of claim 6 or 26, ~~Claim 6~~ wherein the amount of free MetAP-2 is determined using a method comprising the steps of:

(i) contacting ~~at least a portion of~~ each of the biological samples with a saturating amount of a quantifiable irreversible MetAP-2 inhibitor, whereby substantially all of the free MetAP-2 reacts with the quantifiable irreversible MetAP-2 inhibitor to form a MetAP-2/inhibitor complex; and

(ii) determining the amount of MetAP-2/inhibitor complex produced in step (i).

8. (Currently Amended) The method of claim 6 or 26, ~~claim 1~~ wherein each of the plurality of biological samples is selected from the group consisting of whole blood, a blood fraction, erythrocytes, white blood cells, T-cells, B-cells, macrophages; tumor tissue; cancer cells; bone marrow; synovium, synovial fluid, cerebrospinal fluid; liver tissue; brain tissue; prostate tissue, breast tissue, lymph node tissue and spleen.

9. (Currently Amended) The method of claim 6 or 26 ~~claim 1~~ further including the step of lysing the cells in each of the plurality of biological samples following step (b).

10. (Currently Amended) The method of claim 6 or 26 ~~claim 1~~ further comprising the step of homogenizing each of the biological samples, ~~or portions thereof~~ following step (b).

11. (Original) The method of Claim 6 wherein the test compound inhibits MetAP-2 activity *in vitro*.

12. (Original) The method of Claim 11 wherein the test compound is an irreversible inhibitor of MetAP-2.

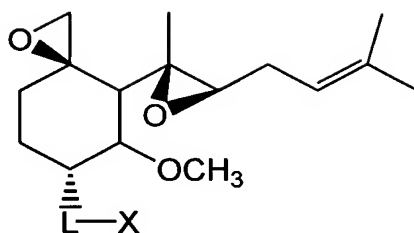
13. (Original) The method of Claim 12 wherein the test compound is a covalent inhibitor of MetAP-2.

14. (Original) The method of Claim 13 wherein the test compound is a fumagillin analogue.

15. (Previously Presented) The method of claim 6 wherein the MetAP-2 inhibitor is a fumagillin analogue.

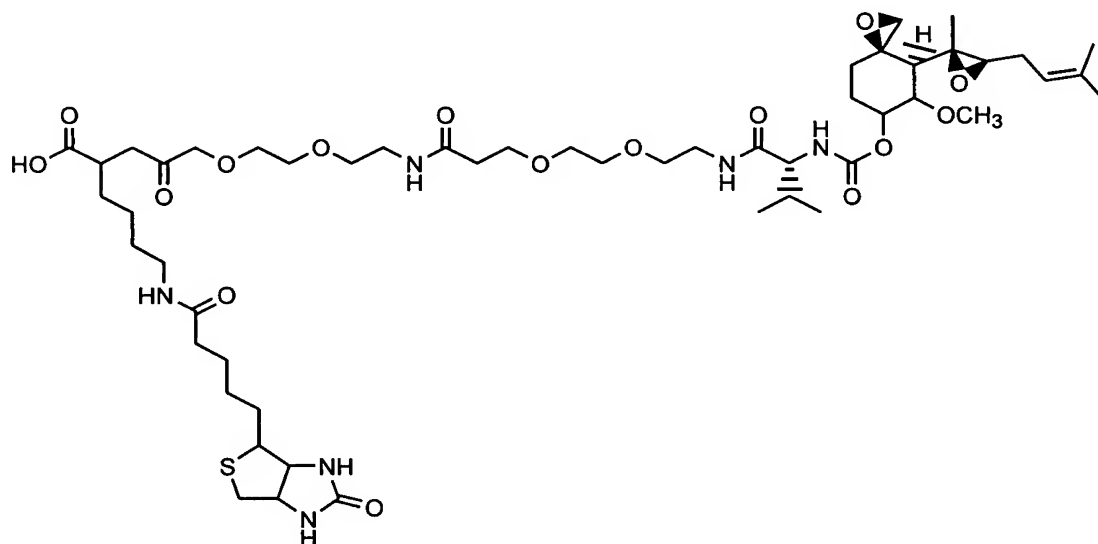
16. (Original) The method of Claim 15 wherein the fumagillin analogue comprises a biotin moiety.

17. (Previously Presented) The method of Claim 16 wherein the fumagillin analogue is of the structure:



, wherein L is a linker group and X is a biotinyl moiety.

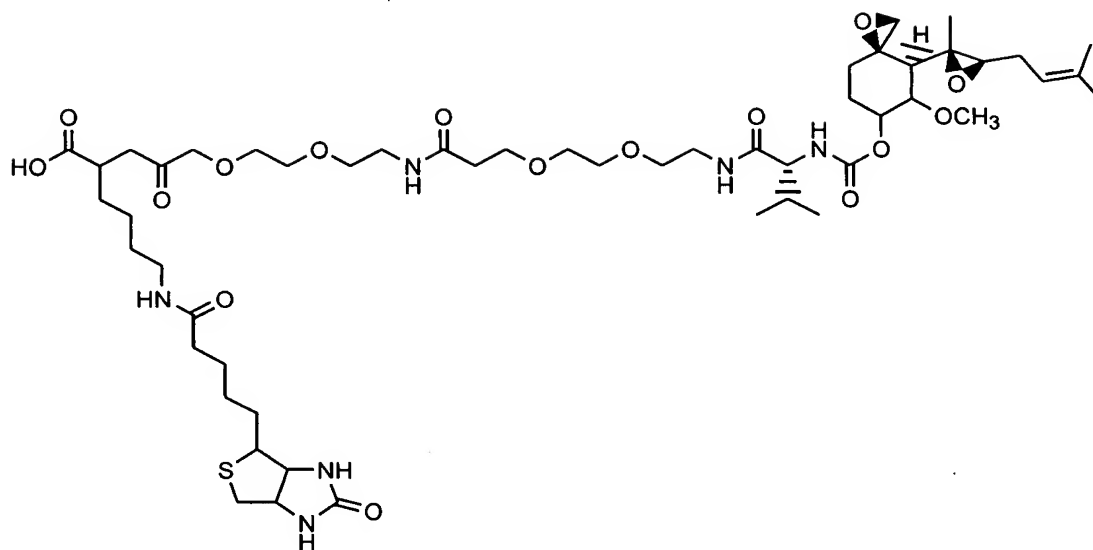
18. (Previously Presented) The method of Claim 17, wherein the fumagillin analogue is of the structure:



19-25. (Canceled)

26. (Currently Amended) A method for determining the extent of inactivation of MetAP-2 in a biological sample, ~~or fraction thereof~~, derived from a subject, comprising the steps of:

(a) administering a test compound which is an inhibitor of MetAP-2 to the subject, wherein any MetAP-2 in the body of the subject that reacts with the test compound is inactivated MetAP-2 and any MetAP-2 that does not react with the test compound is free MetAP-2, wherein the MetAP-2 inhibitor is of the structure



;

- (b) removing a plurality of biological samples from the subject, wherein each of the plurality of biological samples is derived from a different tissue of the subject; and
- (c) determining the amount of free MetAP-2 within each of plurality of the biological samples, ~~or fractions thereof~~; and
- (d) comparing the amounts determined in step (c) with the amount determined in a control sample;

wherein a decrease in the amounts in each of the biological samples determined in step (c) compared to the amount in the control sample determined in step (d) is a measure of the extent of inactivation of MetAP-2 in each of the biological samples, ~~or fractions thereof.~~